



***Blamada rubripronota*, a new genus and species of the tribe Saperdini (Coleoptera: Cerambycidae: Lamiinae) from Southeast Asia**

MEI-YING LIN^{1,3} & CAROLUS HOLZSCHUH²

¹Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, 1 # Beichen West Road, Chaoyang, Beijing, 100101, China

²Spitzeckweg 11, A-9500 Villach, Austria

³Corresponding author. E-mail: linmeiying@ioz.ac.cn

Abstract

A new saperdine species belonging to a new genus, *Blamada rubripronota* **gen. et sp. nov.**, is described from Laos, Vietnam and China. The genus differs from other genera of the tribe Saperdini in having the antennal scape bearing an expanded and ridged ring at apex, and second antennomere relatively longer (more than 1/4 of scape in length) than that of other saperdine taxa.

Key words: *Blamada rubripronota*, new genus, new species, Cerambycidae, Lamiinae, Saperdini, Oriental region

Introduction

Breuning's (1952, 1954) worldwide revisional work on the Saperdini *sensu lato* (including Saperdini and Phytoeciini) included 77 genera. Some new genera were described later and some subgenera were raised to genera. At present 113 genera of Saperdini *sensu lato* are known worldwide (based on the senior author's data). In the Catalogue of Palearctic Coleoptera (Löbl & Smetana, 2010), the Saperdini and Phytoeciini were treated as two tribes, which we followed.

In this paper we describe a new genus and species of the tribe Saperdini *sensu stricto*, *Blamada rubripronota* **gen. et sp. nov.**, from Laos, Vietnam and China, bringing the number of the genera of Saperdini to 32 in the Palearctic region (as defined in Löbl & Smetana, 2010) and 31 in China (*Niponostenostola* Ohbayashi, 1958 is endemic to Japan).

The holotype and twelve paratypes are deposited in the collection of Carolus Holzschuh, Villach, Austria (CCH). Three additional paratypes are deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZAS), one female paratype in the collection of Lubos Dembický, Brno, Czech Republic (CLD) and one male paratype in the collection of Petr Viktora, Kutná Hora, Czech Republic (CPV).

***Blamada* gen. nov.**

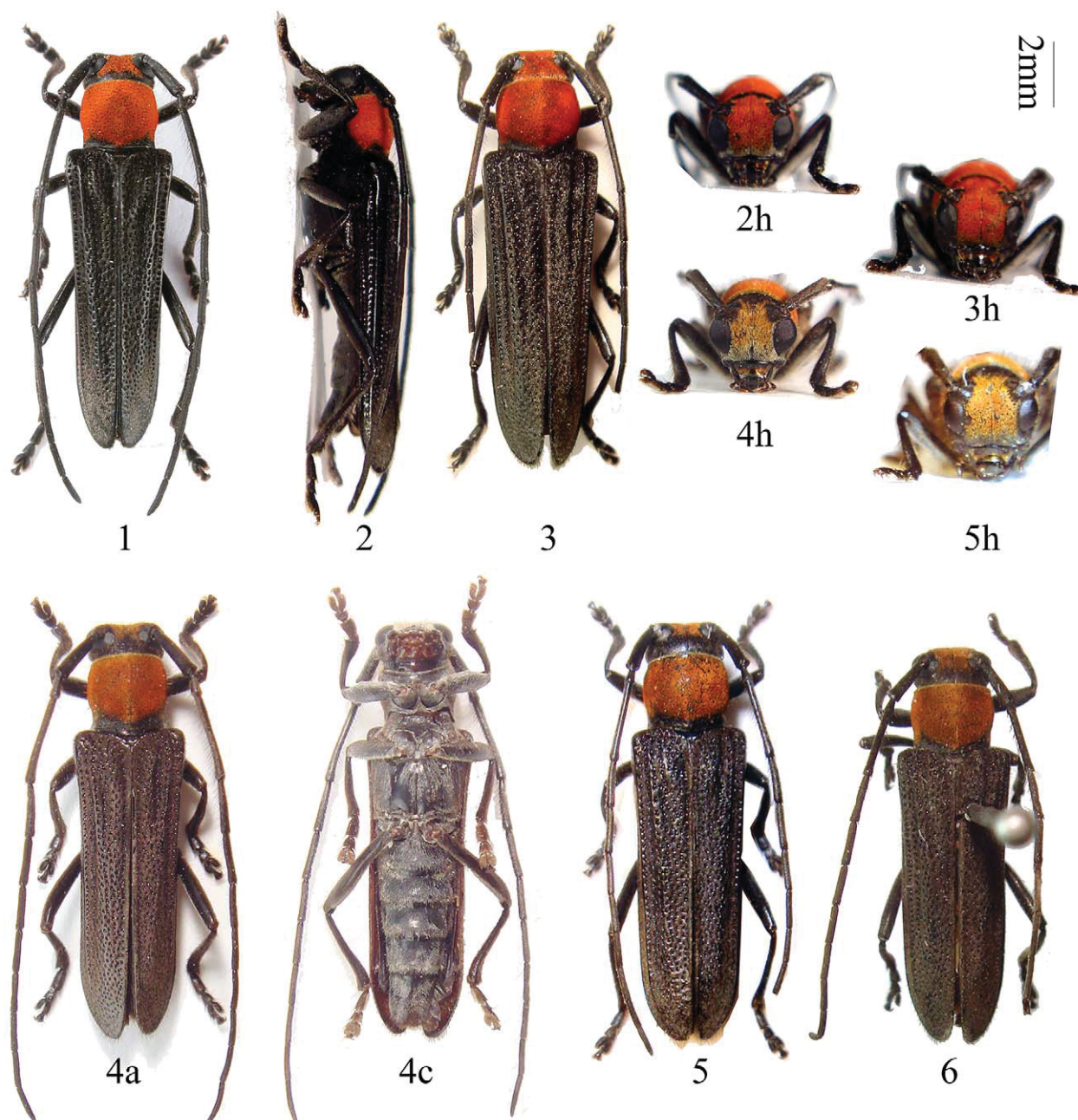
Type species: *Blamada rubripronota* **sp. nov.**

Diagnosis. Differs from all other saperdine genera by the scape of antennae with an expanded and ridged ring at apex, and second antennomere being relatively longer (more than 1/4 of scape in length). It also differs from *Eutetrappa*, *Paraglenea*, *Heteroglenea* (as defined in Lin *et al.*, 2009) and *Pareutetrappa* by the male claws simple instead of appendiculate (special or normal) or bifid and from *Eumecocera* and *Stenostola* by elytra with lateral carinae and male claws simple instead of appendiculate or bifid. The combination of the following characters makes the new genus easily separable from other saperdine genera: prothorax without lateral tubercles, elytra with distinct lateral carinae, elytral apex rounded, male and female claws all simple.

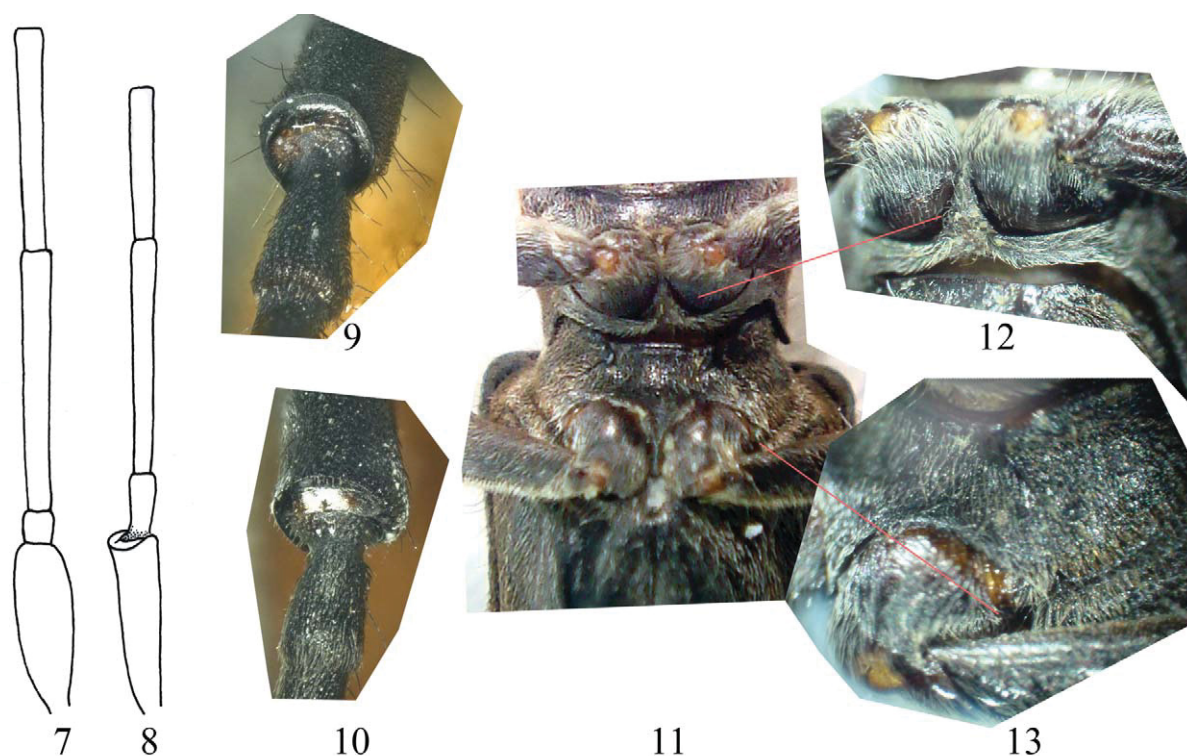
Description. Small-sized (under 15 mm). Head broad with tumid eyes (Figs 2h, 3h, 4h, 5h), frons broader than long or as broad as long, eyes deeply emarginate, not divided. Antennae longer than body, basal segments fringed with dense setae, scape slightly expanded, with an expanded and ridged ring at apex (Figs 8–10), 2nd antennomere relatively long (more than 1/4 of scape in length), 3rd antennomere always the longest, 4th antennomere subequal to scape, 4th to 10th slightly and gradually decreasing in length, 11th longer than 10th. Prothorax cylindrical, without lateral spine or tubercle. Elytra subparallel, rounded apically, each with one distinct lateral carina starting from the base but not reaching the apex (Figs 2, 4b). Procoxal cavity closed posteriorly (Fig. 12), metepisternum more than twice as wide anteriorly as posteriorly, hind femur reaching fourth abdominal segment. Both male and female with simple claws.

Etymology. The generic name is an arbitrary combination of letters. Gender feminine.

Distribution. Southeast Asia.



FIGURES 1–6. Habitus, *Blamada rubripronota* sp. nov. 1. holotype, male, from Laos, picture taken by Lubos Dembický; 2. paratype, male, from Laos, lateral view; 3. paratype, female, from Laos; 4. paratype, male, from Vietnam; 5. paratype, female, from Vietnam; 6. paratype, female, from China. a. dorsal view, c. ventral view, h. head, front view. Scale = 2 mm.



FIGURES 7–13. Some important characters. 7–8. drawings of basal four antennomeres (by Wenzhu Li): 7. typical saperdine antenna, showing the scape apex normal and second antennomere short, and 8. special antenna of *Blamada rubripronota* sp. nov., showing the scape apex expanded with a ridged ring and second antennomere longer; 9–10. scape apex and second antennomere of *Blamada rubripronota* sp. nov.: 9. male and 10. female; 11. prothorax and mesothorax in ventral view. 12. showing procoxal cavity closed. 13. showing mesocoxal cavity open to mesepimeron. Not to scale.

***Blamada rubripronota* sp. nov.**

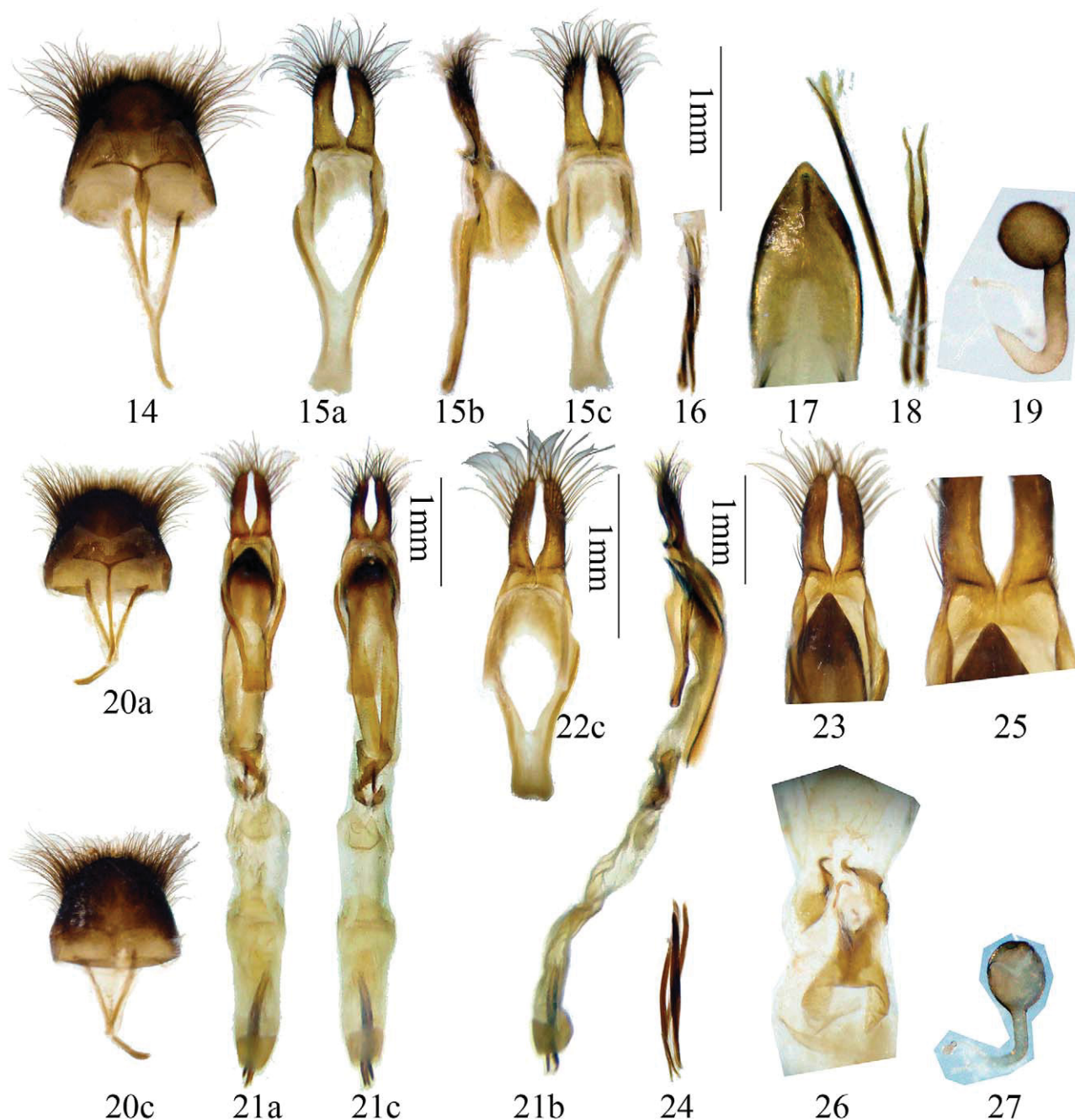
(Figs 1–27)

Description (based on ten males and eight females): Male: length: 9.7–12.5 mm, humeral width: 2.6–3.3 mm. Female: length: 11.6–13.1 mm, humeral width: 3.2–3.4 mm. Body black. Head black, with frons to occiput covered with dense orange red pubescence (Figs 2h, 3h, 5h, in some male cases whitish at base, Fig. 4h); antennae black. Prothorax covered with dense orange-red pubescence except ventral part and narrow line at base (Figs 1–6). Scutellum black. Elytra black, without any maculae, covered by rather dense, very fine, dark pubescence, and on basis or basal half with some longer erect hairs. Ventral surface black with grayish white pubescence. Legs black. Head not broader than prothorax. Eyes deeply emarginate, inferior eye lobe much higher than gena below it, width subequal to (male) or shorter than (female) $\frac{1}{2}$ of frons. Antennae longer than body with 9th segment in male 10th segment in female extending beyond elytral tip, and basal six segments fringed with dense setae. Antennomere ratio: male, 16:5:24:16:15:13:13:12:12:11:14; female, 13:4:20:13:12:11:11:10:10:9:10. Prothorax broader than long. Elytra subparallel, rounded apically, densely punctured, each with a humeral longitudinal ridge not reaching the apex and with a dorsal carina on basal third. Hind femur reaching fourth abdominal segment, first hind tarsal segment slightly shorter than the following two segments combined. Male terminalia (Figs 14–18, 20–26): Tegmen about 2.0 mm in length; lateral lobes slender (Figs 15, 22c), each about 0.6 mm long and 0.1 mm wide, provided with finely haired ridge at ventral base (Figs 15a, 25), apex with long setae; ringed part elbowed in widest portion, converging; basal piece bifurcated apically (Figs 15c, 22c); median lobe plus median struts moderately curved (Fig. 21b), subequal to tegmen in length; median struts slightly more than one half of whole median lobe in length; dorsal plate slightly shorter than ventral plate; apex of ventral plate pointed (Figs 17, 23); median foramen elongated; internal sac about 2.5 times of whole median lobe in length, with three pieces of basal armature (Fig. 26) and three rods of endophallus (Figs 16, 18, 24); two longer rods each about 1.1 mm, only about

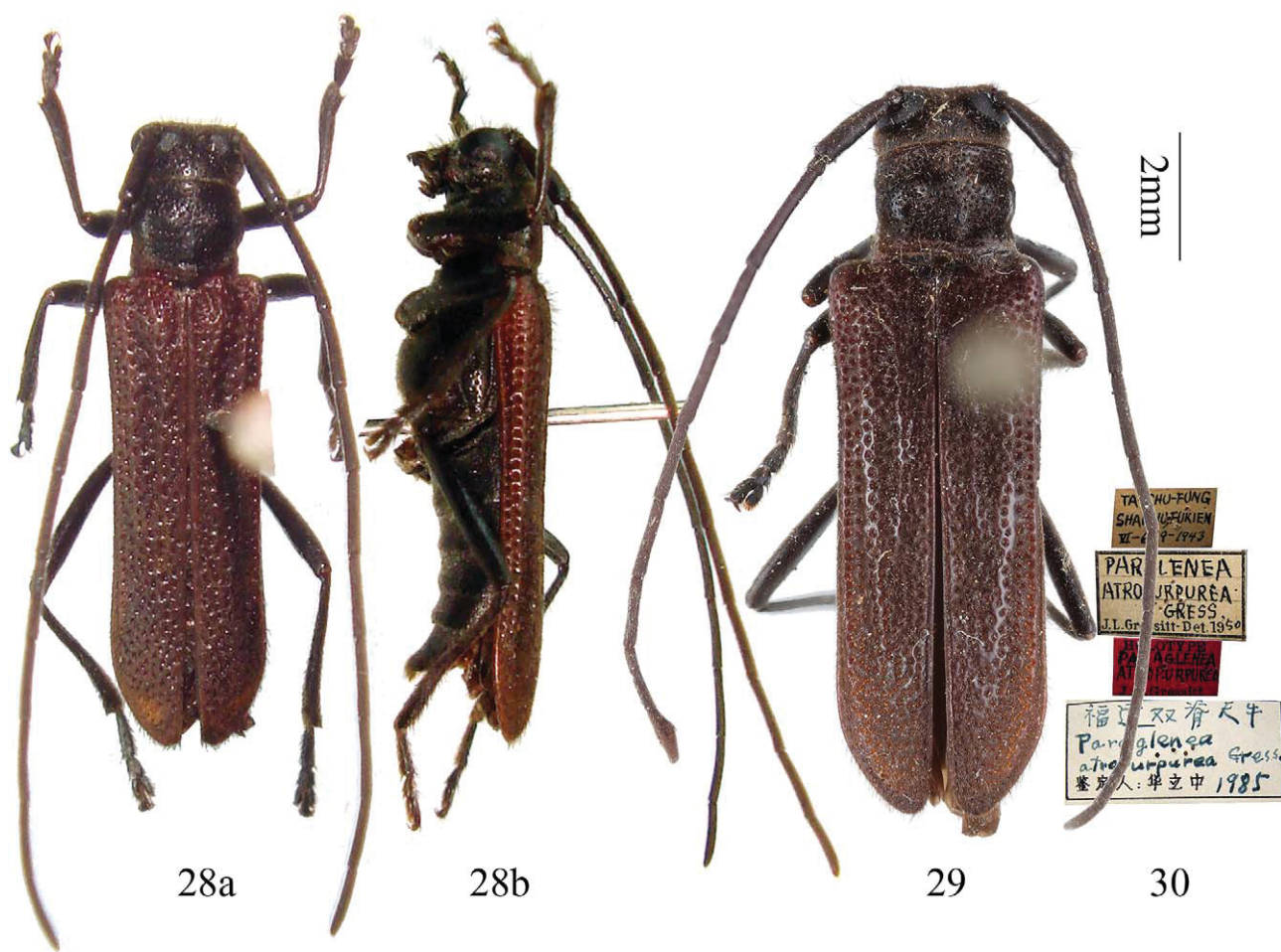
half length of tegmen, the shorter one about 0.9 mm and can be bifurcated (Fig. 18). Tergite VIII (Figs 14, 20) slightly broader than long, apex rounded with a small median groove, with dense and long setae. Sternite IX (Figs 14, 20) Y-shaped, with middle part expanded. Female terminalia: Spermathecal capsule (Figs 19, 27) consisting of a distinctly expanded apical lobe and a curved stalk; stalk slightly longer than apical lobe. Tignum shorter than abdomen. In our observation, tignum 4.2 mm for an adult with a 5.3 mm abdomen in ventral view.

Etymology. The species is named after the orange-red pubescent pronotum.

Remarks. This species resembles *Paraglenea atropurpurea* Gressitt at first glance by the similar shape and colour. The modified distal scape and longer pedicel and simple claws in both sexes exclude this species from the genus *Paraglenea*.



FIGURES 14–27. Terminalia of *Blamada rubripronota* sp. nov. 14–18. male, from Laos: 14. tergite VIII and sternites VIII & IX; 15. Tegmen; 16. apical rods of endophallus; 17. apex of ventral plate and 18. apical rods of endophallus, separated; 19. female, from Laos, spermatheca; 20–26. male, from Vietnam: 20. tergite VIII and sternites VIII & IX; 21. male genitalia; 22. tegmen, a. ventral view, b. lateral view, c. dorsal view; 23 & 25. apex of ventral plate and lateral lobes of tegmen; 24. apical rods of endophallus; 26. armature of endophallus; 27. female, from China, spermathecal capsule. Scale = 1 mm but 17–19 & 25–27 not to scale.



FIGURES 28–30. Habitus, *Paraglenea atropurpurea* Gressitt, 1951. 28. male, from Guangxi, China, a. dorsal view, b. lateral view; 29. holotype, female, from Fujian, China; 30. labels of holotype. Scale = 2 mm.

P. atropurpurea was described based on an unique female holotype (Figs 29–30), which was deposited in Sun-Yatsen University. After studying a series of fresh specimens, we can confirm that the male claws are appendiculate, which makes it reasonable to place the species in the genus *Paraglenea*, although its elytral lateral carina is not as strong as that of typical *Paraglenea*. Further details will be shown in future revisional work on *Paraglenea*.

We consider the limited specimens from Vietnam and China to be the same species as the type locality fauna for this moment. Further study is needed when enough material is available because some small differences exist, such as: the unique male from Vietnam seems to have slightly longer antennae and sternite IX without expanded middle part; the unique female from China has a shorter basal curved stalk in spermathecal capsule than that from Laos. Without series of material, it is difficult to conclude whether this represents variation within species or differences between species.

Distribution. Laos (Hua Phan Prov.), Vietnam (Vinh phu Prov.), China (Guangxi Prov.).

Material examined. Holotype (10.9 mm long), male, NE. Laos, Hua Phan Prov., Ban Saleui, Phou Pan (Mt.), ~20°12'N 104°01'E, 1300–1900 m, 2011.V.10, leg. Carolus Holzschuh (CCH). Paratypes: 7 males 5 females, NE. Laos, Hua Phan prov., Ban Saleui, Phou Pan (Mt.), ~20°12'N 104°01'E, 1300–1900 m, 2011.V.4, 2011.V.5, 2011.V.7, 2011.V.10, 2011.V.12, 2011.V.15, 2012.IV.17, 2012.IV.19, 2012.IV.22, 2012.IV.28, and 2012.V.5, leg. Carolus Holzschuh (CCH, with one male IOZ(E) 1859286 and one female IOZ(E) 1859285 deposited in IZAS); 1 male, NE. Laos, Hua Phan Prov., Mt. Phu Pane, 1200–1600 m, 2011.V.31–VI.1, leg. St. Jakl and Lao collectors (CPV). **Vietnam:** 1 male, Vietnam, Vinh phu Prov., Tam dao, 1985.IV.3–11, leg. Jan Víša (CCH); 1 female, N. Vietnam, Tonkin, 75 km NW. Hanoi, Tam Dao national park, 1991.V.15–VI.16, leg. E. Jendek (CCH); 1 female, N. Vietnam, 70 km NW. of Hanoi, Tam Dao, 21°27'N, 105°39'E, 900–1200 m, 1996.VI.1–8, leg. L. Dembický & P.

Pacholátko (CLD). **China:** 1 female, S. China, Guangxi Prov., Jinxiu, Shengtangshan, alt. 900–1900 m, 2000.VI.8, leg. Wenzhu Li (IZAS, IOZ(E) 1859284).

Acknowledgements

We wish to express our thanks to Petr Švácha (Institute of Entomology, Academy of Sciences, Ceske Budejovice, Czech Republic) and Qiao Wang (Institute of Natural Resources, Massey University, Palmerston North, New Zealand) for their helpful comments and to Jennifer Hammock (Smithsonian Institution, National Museum of Natural History, Washington, USA) for improving this manuscript, to Wenzhu Li (IZAS) for making the drawings of antennae, and to Lubos Dembický (Brno, Czech Republic) for taking the holotype picture and providing a female from Vietnam. We thank Hong Pang, Lizhong Hua, Fenglong Jia and Binglan Zhang (Sun-Yatsen University, Guangzhou, China), and Petr Viktora (CPV) for giving access to the collection, Jianhua Huang (Guangxi Normal University, Guangxi, China) for providing the male specimen, Wenxuan Bi (Shanghai, China) for taking the holotype picture of *Paraglenea atropurpurea* Gressitt. This research was supported by a grant (No. O529YX5105) from the Key Laboratory of the Zoological Systematics and Evolution of the Chinese Academy of Sciences, and by NSFC programs J1210002 and 31000967.

Literature cited

- Breuning, S. (1952) Revision einiger Gattungen aus der Gruppe der Saperdini Muls. (Col. Cerambycidae). *Entomologische Arbeiten aus dem Museum G. Frey, Tutzing bei München*, 3 (1), 107–213, 3 pls.
- Breuning, S. (1954) Revision von 35 Gattungen aus der Gruppe der Saperdini Muls. (Col. Cerambycidae). *Entomologische Arbeiten aus dem Museum G. Frey, Tutzing bei München*, 5 (2), 401–567, 3 pls.
- Lin, M.Y., Montreuil, O., Tavakilian, G. & Yang, X.K. (2009) Reinstatement of the genus *Heteroglenea* Gahan, with four new combinations, four new synonyms and three new species (Coleoptera: Cerambycidae: Lamiinae: Saperdini). *Zootaxa*, 2137, 1–22.
- Löbl, I. & Smetana, A. (eds.) (2010) *Catalogue of Palaearctic Coleoptera, Vol. 6: Chrysomeloidae*. Apollo Books, Stenstrup, 924 pp.